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Dunn's Salamander

Plethodon dunni

Range:

Extreme northeast California, western Oregon, and southwest Washington (Brodie 1970).

Washington Distribution:

The southwest corner of the state including the western edge of Cowlitz County and most of Pacific and Wahkiakum Counties.

Habitat Requirements:

Dunn's salamanders are found in wet, heavily shaded, rocky substrate, including moist talus slopes, seepages, and stream borders. The ground surfaces are usually covered with several inches of duff (Dumas 1956, Nussbaum et al. 1983). These salamanders also use downed logs for cover and feeding. Preferred logs probably have bark ranging from intact to absent, and texture ranging from intact to small, soft pieces (Bartels et al. 1985).

Limiting Factors:

Availability of moist, rocky substrate or decaying logs that are well-shaded.

Management Recommendations:

Maintain streamside corridors adjacent to all size classes of streams with rocky or gravelly banks. These salamanders require both the moisture and the increased erosion protection provided by these corridors. Leave understory plants and noncommercial trees in gravel and rock seepage areas during logging operations to prevent desiccation of habitat. Maintain at least 50% shade along stream banks and wet talus seepage areas.

Where logging occurs, a minimum of 5 uncharred hard logs at least 5cm (12") diameter and at least 7m (20') long, per hectare (2.5 acres) should be retained. All soft logs of this size should also be retained (Bartels et al. 1985).

Dunn's salamander habitat includes many streamsides that are not used by significant numbers of resident game fish or anadromous fish (classified as Type 4 or Type 5 waters under the State Forest Practice Regulations). Logging should not occur within 7.6m (25') of these waters when Dunn's salamanders are present; however, a 25m (69') buffer is perferred (Wilson, pers. comm.).

References:

Bartels, R., J.D. Dell, R.L. Knight, and G. Shaefer. 1985. Dead and down woody material. Pp 171-186 in E.R. Brown, ed. Management of wildlife and fish habitats in forests of western Oregon and Washington. Part 1 - Chapter narratives. USDA Forest Service, PNW # R6-F&WL-192-1985.

Brodie, E.D., Jr. 1970. Western salamanders of the genus Plethodon, systematics and geographic variation. Herpetologica 26(4):468-516.

Dumas, P.C. 1956. The ecological relations of sympatry in Plethodon dunni and Plethodon vehiculum. Ecology 37(3):484-495.

Nussbaum, R.A., E.D. Brodie, Jr., and R.M. Storm. 1983. Amphibians and reptiles of the Pacific Northwest. Univ. of Idaho Press, Moscow.

Wilson, A. Research Zoologist, Washington State Univ., Pullman, WA.

Key Points:

Habitat Requirements:

Inhabit wet, heavily shaded, rocky substrates in forested sites.

Management Recommendations:

- Maintain streamside corridors adjacent to all size classes of streams with rocky or gravelly banks.
- Leave understory plants and noncommercial trees in seepage areas during logging operations.
- Maintain at least 50% shade along stream banks and wet talus seepage areas.
- Retain all soft, downed logs and at least 5 hard logs 5 cm diameter and 7 m long per hectare where logging occurs.
- Avoid logging within 7.6 m of Type 4 and Type 5 waters.